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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/629,547	04/09/96	TAKAHASHI	T ATS-032-CON/

CSM1/1024

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EXAMINER

LUONG, V

ART UNIT

PAPER NUMBER

3502

DATE MAILED:

10/24/96

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☒ Responsive to communication(s) filed on 6/21/96
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three (3) month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-42 is/are pending in the application.
- Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-42 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☒ received in Application No. (Series Code/Serial Number) 07/485,659
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

BEST AVAILABLE COPY

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1. The drawings are objected to because each part of the invention such as: (a) the clearances in claims 1 and 8; (b) the clearance in claim 15; (c) first member end and the second member end in claims 18, 23, etc.; (d) the imaginary flat surface in claims 19, 24, etc.; (e) the unit in claim 29, 42, etc.; (f) the first end and the second end in claim 15; (g) the surface of revolution in claims 22, 37, etc.; and (h) the axial distance in claim 23, etc., should be designated by a referential numeral or character. See 37 CFR 1.84. Correction is required.

The drawings lack too numerous referential characters or numerals to point out specifically. Applicant is urged to review the drawings in accordance with MPEP 608.02 and 608.02(d).

2. The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed features such as: (a) the imaginary flat surface in claims 19, 24, etc.; (b) the unit in claims 29, 42, etc.; (c) the surface of revolution in claims 22, 37, etc.; and (d) the axial distance in claim 23, etc., must be shown or the features cancelled from the claims. **No new matter should be entered.**

The drawings do not show too numerous claimed features to point out specifically. Applicant is reminded of his duty to comply with the requirement under 37 CFR 1.83, or cancel the unillustrated features from the claims.

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3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The claims are drawn to a flywheel assembly, however, the title is drawn to "Crankshaft Assembly..."

4. Claims 1-42 are rejected as being based upon a defective reissue declaration under 35 U.S.C. § 251. See 37 C.F.R. § 1.175.

Claims 1-42 are rejected under 35 USC 251 inasmuch as applicant's reissue declaration fails to:

(a) particularly specify the errors discovered both **prior to** filing and **during** the prosecution of U.S. Application Numbers 07/485,659 (SN'659) and 08/243,526 (SN'526). See *In re Constant*, 3 USPQ2d 1479 (CAFC 1987);

(b) provide the reasons as to **how** each and every error arose or occurred and the proximate dates of discovery.

Page 3 et seq. of the declaration merely alleges that the claims of the Patent No. 5,465,635 (pat.'635) are not broad enough to encompass the device shown in the attached Fig. A but fail to distinctly specify **the excess or insufficiency** in the claims. 37 CFR 1.175(a)(3). It is well settled that the allegations of the inventor's ignorance of drafting and claiming technique to adequately encompass the invention and counsel's ignorance of the invention is unavailing. Those allegations

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could be frequently made, and, if accepted as establishing errors, would require the grant of reissue on anything and everything mentioned in a disclosure. *In re Weiler*, 229 USPQ 673, 677 (CAFC 1986) (footnote 4).

Applicant fails to: (1) specify as to why applicant failed to appreciate the full scope of the invention; and (2) provide adequate support in the form of *affidavits by the ones involved in the prosecution of the original patent application* in paragraph 11 *et seq.* of the declaration. See *In re Wilder*, 222 USPQ 369 (CAFC 1984); *In re Weiler, supra*; and MPEP § 1402, 1414, and 1414.03.

It is unclear as to why the discovery of the device shown in Fig. A after the issuance of the patent has a nexus with the excess or insufficiency in the claims. Additionally, it is unclear as to why the discovery of the device shown in Fig. A after the issuance of the patent: (1) renders the original patent to be wholly or partially invalid; and (2) creates an error **prior to** filing and **during** the prosecution of SN'659 and SN'526. Note that the reissue is improper because there had been no error in issuing the original patent claims within the meaning of 35 USC 251). *Mentor Corp. v. Coloplast, Inc.*, 998 F.2d 992 (CAFC 1993).

In summary, applicant fails to specifically explain **what** errors, **whose** errors, **how** the errors occurred, **when** and **why** the

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errors occurred. See *Hewlett-Packard v. Bausch & Lomb*, 11 USPQ2d 1750, 1758 (CAFC 1990).

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 C.F.R. § 1.75(d)(1) and M.P.E.P. § 608.01(1). The claims are replete with instances of lacking antecedent bases in the specification too numerous to point out specifically. For example, see the terms such as: (1) "a driving shaft" and "a circular elastic member" in claim 15; (2) "an inner portion" in claim 17; (3) "a smooth outer circumferential surface" in claim 17; (4) "a first member end" and "a second member end" in claims 18 and 23; (5) "an imaginary flat surface" in claims 19, 39; (6) "a surface of revolution" in claim 37; and (7) "a received portion" in claim 25, etc. It is well settled that "words must be used in the same way in both the claims and specification." *Magnesystems Inc. v. Nikken Inc.*, 34 USPQ2d 1112, 1115 (D.C. C. Calif. 1994) and cases cited therein. Applicant is urged to use the same terminology in the claims and specification. Correction is required.

6. The disclosure is objected to because of the following informalities: each part of the invention such as: (a) the clearances in claims 1 and 8; (b) the first member end and the second member end in claims 18, 23, etc.; (c) the imaginary flat surface" in claims 19, 24, etc.; (d) the unit in claim 29, 42,

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etc.; and (e) the first end and the second end in claim 15, etc., should be designated by a referential numeral or character. See 37 CFR 1.84. Appropriate correction is required.

7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible errors.

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

8. Claims 17-30, 32-42 are rejected under 35 USC 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention.

New claims 17-30 and 32-42 are unsupported by the original disclosure. For example:

(a) claims 17, 20, 32, etc., call for "said reinforcing member (4) comprises a *smooth* outer circumferential surface".

A review of the entire original disclosure shows that applicant did not disclose on the filing date that the reinforcing member comprises a *smooth* outer circumferential surface. In fact, although lines 10-13 on page 5 and lines 17-28 on page 13 of the original disclosure describe that the engagement between the radial surface 5g of the flywheel and the clutch facing 8 is performed quite smoothly, however, nowhere in the specification describes that the reinforcing member comprises

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a *smooth* outer circumferential surface. Note that "a smooth engagement" is not synonym to "a smooth surface." For example, two rough surfaces such as the surfaces of a brake pad and a brake shoe may have a smooth engagement with each other.

On the other hand, the patent drawings are not engineering drawings drawn on scale. The surface of the reinforcing member as shown in the original drawings may be smooth or rough as viewed, e.g., under a microscope. The recital of a specific smooth surface within a full spectrum of possible smooth and rough surfaces is considered under the present disclosure to be new matter. Cf., *In re Smith*, 173 USPQ 679 (CCPA 1972) and *Ex parte George*, 230 USPQ 575, 578 (Bd. Pat. App. & Inter. 1986). Similarly, the new claimed features such as "an outer *smooth* curved surface section" in claim 18, and "a *smooth* outer circumferential curved surface" in claim 21, etc., are unsupported by the original record, i.e., new matters;

(b) claims 22 and 37, etc., call for "a surface of *revolution* whose diameter increases smoothly from said abutment surface of said reinforcing member to said curved surface end of said smooth outer circumferential curved surface."

A review of the entire original disclosure shows that applicant did not disclose on the filing date the so-called "a surface of *revolution*..." In fact, the drawings fail to show the *surface of revolution*. The new concept of the *surface of*

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*revolution* is not present in the original disclosure, i.e., new matter. *In re Anderson*, 176 USPQ 331 (CCPA 1973); and

(c) claims 19, 24, etc., call for "said flywheel body comprises a side surface facing toward said elastic plate, and said engageable surface (5g) which faces away from said elastic plate and which extends in an *imaginary flat surface*..."

A review of the entire original disclosure shows that applicant did not disclose on the filing date that the so-called "*an imaginary flat surface*". In fact, the drawings fail to show the *imaginary flat surface*. The new concept of the *imaginary flat surface* is not present in the original disclosure, i.e., new matter. *In re Anderson, supra*.

9. Claims 1-42 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear whether:

(a) applicant claims a flywheel assembly *per se*, or a combination of a flywheel assembly and a driven unit;

(b) applicant claims a flywheel assembly *per se*, or a process of making/assembling of a flywheel assembly. See, e.g., the last three lines of claim 42;



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(c) applicant claims a flywheel assembly *per se*, or a process of using a flywheel assembly. See, e.g., "wherein" clause in claim 13 and "so as" clause in claim 29;

(d) the terms that appear at least twice such as: (1) "an outer portion" and "an inner portion" in claims 15, 17; and (2) "an axial distance" in claim 23, etc., refer to the same or different structures. See MPEP 608.01(o). Applicant is urged to identify each claimed element with reference to the original drawings; and

(e) a confusing variety of terms such as: (1) "a flywheel assembly" in claim 1 and "a flywheel" in claim 13, 14, etc.; (2) "a crankshaft" in claims 1 and 13 and "a driving shaft" in claim 15; (3) "an elastic plate" in claim 13 and "a circular elastic member" in claim 15; and (4) "a first member end" and "a second member end" in claims 18 and 23 and "a cylindrical outside surface" in claim 26, etc., refers to the same or different structures. See MPEP 608.01(o). Applicant is urged to identify each claimed element with reference to the original drawings.

It is unclear which structures are "a smooth outer circumferential surface" in claim 17; "a first member end" and "a second member end" in claims 18 and 23; "a first end" and "a second end" in claim 15; "an imaginary flat surface" in claims 19, 39, etc.; and the surface of revolution in claim 22, etc.

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Applicant is urged to identify each claimed element with reference to the original drawings.

The terms such as "loosely fit", "smooth" and "flat surface" in claims 15, 17-30, 32-34, etc., are relative terms which render the claims indefinite. These terms are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is unclear, e.g., how smooth is considered to be a smooth surface. See the term "smooth" in *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 230 USPQ 416 (CAFC 1986); *Ex parte Oetiker*, 23 USPQ2d 641 (Bd. Pat. App. & Inter. 1992 and MPEP 2173.05(b)).

The terms such as "engageable" and "movable" are vague and indefinite in the sense that things which may be done are not required to be done, e.g., in claim 1, the engageable surface is engageable, but not required structurally to be engaged with a clutch disc. See "crimpable" in *In re Collier*, 158 USPQ 266 (CCPA 1968); "discardable" in *Mathis v. Hydro Air Industries*, 1 USPQ2d 1513, 1527 (D.C. Calif. 1986); "removable" in *In re Burke, Inc.*, 22 USPQ2d 1368, 1372 (D.C. C. Calif. 1992); and "comparable" in *Ex parte Anderson*, 21 USPQ2d 1241, 1249 (Bd. Pat. App. & Inter. 1992).

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10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action in the prosecution history of the original application Serial Numbers 08/243,526 and 07/485,659.

11. Claims 13-42, as best understood, are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103 as obvious over Numata (Japanese Patent Publication No. 57-058,542).

Assuming *arguendo* that applicant claims a flywheel assembly *per se*:

35 USC 102(b)

At the outset, note that Numata's teachings are fully explained in the decision of the Board of Patent Appeals and Interferences on January 5, 1994 (Paper No. 26) in SN'659. The Board's explanation is incorporated herein by reference.

Regarding claims 13, 14, 16, 27, 28, 29, 31, and 42, Numata teaches a flywheel comprising an elastic plate 3 secured to a crankshaft 1, a flywheel body 9 secured to said elastic plate 3, a reinforcing member 24 for reinforcing the plate 3 at a portion of the plate 3 which is secured to the shaft 1, the plate 3 inherently having an axial rigidity in the range of 600 kg/mm to 2,200 kg/mm and an axial run-out which is equal to or less than 0.1 mm (see pages 7-10 of the Board decision); wherein the plate 3 is clamped between the member 24 and a shaft end of the shaft 1

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as seen in Fig. 4. Particularly, regarding claim 19, the flywheel and the reinforcing member of Numata are inherently assembled in a unit. On the other hand, the patentability of product-by-process (assembly) is based on product *per se*.

Regarding claims 15, 17, and 30, see driving shaft 1, circular elastic member 3 comprising outer and inner portions (Figs. 2-5), annular flywheel member 9 comprising outer and inner portions, the inner portion of the flywheel 9 comprising a central circular hole (at 8' in, e.g., Figs. 2 and 4), reinforcing member 24 comprising a cylindrical portion (Fig. 5) extending from a first end to a second end, an inner portion (at 26 in Fig. 4) extending radially inwardly from the first end of the cylindrical portion, the inner portion being fastened (by fastener 2) to a shaft end of the shaft 1, the cylindrical portion of the member 24 being fit in the circular hole of the flywheel 9 as plainly seen in Fig. 5 with a clearance (unnumbered) to form a loose fit; wherein the inner portion of the member 3 is clamped between the reinforcing member 24 and the shaft end of the shaft 1 as seen, e.g., in Fig. 4.

Regarding claims 18, 20, 21, 32, 35, and 36, see regarding claim 15 above. Additionally, since the reinforcing member 24 is similar to applicant's reinforcing member, thus, it also comprises an outer smooth curved section in the same manner as applicant's reinforcing member.

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Regarding claims 19, 21, and 34, the flywheel 9 comprises a side surface 26 facing the elastic plate as seen in Fig. 4

Regarding claims 22, and 37, see a surface of revolution in Fig. 5.

Regarding claims 23, and 38, note the axial distance or axial run-out described in the translation of Numata reference in SN'659.

Regarding claims 24, and 39, see an imaginary flat surface of the flywheel (e.g., at 9 in Fig. 3) in the Exhibit I attached to the Examiner's Answer on January 13, 1993 in SN'659.

Regarding claims 25, 26, 40, and 41, see regarding claim 15 above and a received portion (at 26 in Fig. 4).

35 USC 103

Regarding claims 13-42, Numata teaches the claimed invention substantially as claimed. Moreover, Numata does explicitly teach the lower frequency band limit of 210 Hz. In other words, Numata implicitly teaches applicant's claimed range of the axial rigidity or axial run-out in order to reduce vibration as explained in the Board decision above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the range of axial rigidity or axial run-out as claimed in order to reduce vibration as implicitly suggested by Numata.

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12. Claims 13-42, as best understood, are rejected under 35 U.S.C. § 103 as being unpatentable over Numata in view of the admitted prior art described in Background Art on page 2 of the original specification.

Regarding claims 13-42, Numata teaches the claimed invention substantially as claimed. However, Numata apparently does not teach applicant's claimed range of the axial rigidity or axial run-out in order to reduce vibration as explained in the Board decision above.

Admitted prior art teaches to choose the range of the axial rigidity or axial run-out in order to reduce vibration as explained in the Board decision above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the range of axial rigidity or axial run-out as claimed in order to reduce vibration as suggested by admitted prior art.

13. Claims 13-16 and 31 are rejected under *res judicata* doctrine since these claims have been rejected by the Board of Patent Appeals and Interferences on January 5, 1994 in SN'659.

Claims 13-16 and 31 have identical scope, if not, substantially identical scope as appealed claims 11-16 and 18 in SN.'659. In fact, applicant merely changes, e.g., the verbiage "a space" in claims 16 and 18 in SN'659 to "a clearance" in claim 15 in the instant application. The Board of Patent Appeals and

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Interferences had rejected these claims based on Numata. The Board's decision is incorporated herein by reference. See MPEP 706.03(w).

14. Claims 1-12 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. 112.

15. As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Luong whose telephone number is (703) 308-3221. The examiner can normally be reached on Monday-Thursday from 7:30 AM EST to 6:00 PM EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Charles Marmor, can be reached on (703) 308-2168. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

Luong

October 21, 1996



VINH T. LUONG  
PRIMARY EXAMINER  
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